



Restriction list (annex XVII)

Date: 2019-06-12

Name	CAS no. (not exhaustive)	Entry no.	Conditions (Simplified, please see ECHA website for details)	Probable professional intention to release?	Presence EEE w/o	in Comments
Polychlorinated terphenyls (PCTs)	-	01	Restricted as a substance and in a mixture including waste oils, or in equipment <50 mg/kg (0,005 % by weight).	Yes		Used in electric transformers, as plasticizer, lubricating oils, flame-retardant. https://www.ec.gc.ca/toxiques-toxics/Default.asp?lang=En&n=98E80CC6-1&xml=1B9628F6-650F-437C-8B9E-87FE14EE7E78
Chloroethene, Chloroethylene (Vinyl chloride)	1975-01-04	02	Shall not be used as propellant in aerosols for any use. Aerosols No dispensers containing the substance as propellant shall not be placed on the market.	No		
Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 (See group members): Hazard class 4.1, Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10, Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F, Hazard class 5.1.	-	03	Banned in ornamental articles, tricks and jokes or articles for No gaming purpose; Banned in decorative oil lamps for supply to the general public; Additional labelling requirements for lamp oils, grill lighter fluids, grill lighters, etc.	No		
Tris (2,3 dibromopropyl) phosphate	126-72-7	04	Banned in any textile article intended to come into contact with the No skin	No		
Benzene	71-43-2	05	Toy or toy parts: <=5 mg/kg (0, 0005 %w/w) in toy or part of toy. No Shall not be placed on the market, or used, as substance or in mixtures in concentrations greater than 0,1 % w/w (example, detergent). Exception: motor oil, industrial use.	No		
Asbestos fibres	12001-28-4, 12001-29-5, 132207-32-0, 12172-73-5, 77536-66-4, 77536-67-5, 77536-68-6	06	Banned as a substance, in mixture or article (exemptions apply)	Yes		Has been used in thermal and electrical insulation, coating, plastics, firefighting garments. https://web.archive.org/web/20110429155522/http://ntp.niehs.nih.gov/ntp/roc/eleventh/profiles/s016asbe.pdf
Tris(aziridinyl)phosphin oxide	545-55-1	07	Banned in textile articles, such as garments, undergarments and No linen, intended to come into contact with the skin.	No		
Polybromobiphenyls, Polybrominatedbiphenyls (PBB)	59536-65-1	08	Banned in textile articles, such as garments, undergarments and No linen, intended to come into contact with the skin.	No		Is a RoHS substance
Benzidine and / or its derivatives, Powder of the roots of Helleborus viridis and Helleborus niger, Wood powder, Powder of the roots of Veratrum album and Veratrum nigrum, o-Nitrobenzaldehyde, Soap bark powder (Quillaja saponaria) and its derivatives containing saponines	552-89-6, 68990-67-0, 92-87-5	09	Banned in jokes and hoaxes or in mixtures or articles intended to No be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	No		
Ammonium hydrogen sulphide, Ammonium sulphide, Ammonium polysulphide	12124-99-1, 12135-76-1, 9080-17-5	10	Banned in jokes and hoaxes or in mixtures or articles intended to No be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	No		
Volatile esters of bromoacetic acids (Ethyl bromoacetate, Butyl bromoacetate, Propyl bromoacetate, Methyl bromoacetate)	105-36-2, 18991-98-5, 35223-80-4, 96-32-2	11	Banned in jokes and hoaxes or in mixtures or articles intended to No be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	No		
2-naphthylamine and its salts (Salts of 2-naphthylamine, 2-naphthylammonium acetate, 2-naphthylammonium chloride, 2-naphthylamine)	553-00-4, 612-52-2, 91-59-8	12	Restricted as substances or in mixtures in concentrations greater No than 0,1 % by weight.	No		Was used as an intermediate in the manufacture of dyes, as an antioxydant in the rubber industry and to produce 2-chloronaphthalene. https://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-10.pdf
Benzidine and its salts, Salts of benzidine, Benzidine	92-87-5	13	Restricted as substances or in mixtures in concentrations greater No than 0,1 % by weight.	No		The main use is in the production of dyes, especially azo dyes in the leather, textile and paper industries. https://www.epa.gov/sites/production/files/2016-09/documents/benzidine.pdf
4-Nitrobiphenyl	92-93-3	14	Restricted as substances or in mixtures in concentrations greater No than 0,1 % by weight.	No		Plastixizer, fungicide, wood preservative and dye intermediate. http://nj.gov/health/eoh/rtkweb/documents/fs/0229.pdf
4-Aminobiphenyl xenylamine and its salts, 4-Aminobiphenyl xenylamine	92-67-1	15	Restricted as substances or in mixtures in concentrations greater No than 0,1 % by weight.	No		Was used as a colour additive. Is also a SVHC. https://monographs.iarc.fr/ENG/Monographs/vol99/mono99-8.pdf
Lead carbonates (Trilead-bis(carbonate)-dihydroxide 2PbCO3-Pb(OH)2, Neutral anhydrous carbonate (PbCO3))	1319-46-6, 598-63-0	16	Banned in paints. Possible exemption for the restoration and Yes maintenance of works of art and historic buildings and their interiors.	Yes		Preparation of Positive Temperature Coefficient (PCT) Ceramic Materials. 1319-46-6 is also and SVHC. http://echa.europa.eu/documents/10162/cf4ed905-0f2f-47e5-978a-7a9bfb06595a
Lead sulphates (Sulphuric acid, lead salt Pb SO4, Lead sulphate PbSO4)	15739-80-7, 7446-14-2	17	Banned in paints. Possible exemption for the restoration and Yes maintenance of works of art and historic buildings and their interiors.	Yes		In paint pigments. Is a RoHS substance. http://nj.gov/health/eoh/rtkweb/documents/fs/1114.pdf

Mercury compounds	-	18	Banned as substances or in mixtures where the substance or No mixture is intended for use to prevent the fouling by micro-organisms, plants or animals (e.g. hulls of boats, cages, floats, nets, submerged applicanes or equipent), in the preservation of wood, in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture, in the treatment of industrial waters.	Is a RoHS substance
Mercury	7439-97-6	18a	Banned in fever thermometers and other measuring (e.g. No barometers, hygrometers, manometers, sphymomanometers, tensiometers, etc). Exemptions apply.	Is a RoHS substance
Arsenic compounds (Strychnidin-10-one, arsenite (1:1), Lead arsenite, Sodium arsenate dibasic heptahydrate, Slimes and Sludges, copper electrolytic refining, decopperized, arsenic-rich, Iron arsenate, Iron bis(arsenate), Arsenic acid, magnesium salt, Arsenic acid, copper salt, Arsenic acid, calcium salt, Arsenic acid (H3AsO4), magnesium salt, manganese-doped, Slimes and Sludges, copper-lead ore roasting off gas scrubbing, arsenic-contg., Strychnine arsenate, Tricopper arsenide, Dysprosium arsenide, Sodium hexafluoroarsenate(V), Diiron arsenide, Gadolinium arsenide, Holmium arsenide, Lutetium arsenide, Manganese arsenide, Terbium arsenide, Thallium arsenide, Thulium arsenide, Ytterbium arsenide, Iron diarsenide, Trizinc diarsenide, Iron arsenide, Digallium arsenide phosphide, Tripotassium arsenide, Trilithium arsenide, Trisodium arsenide, Praseodymium arsenide, Trimagnesium diarsenide, Diarsenic tritelluride, Zinc diarsenide, Nickel diarsenide, Roxarsone, Dichromium arsenide, Erbium arsenide, Lanthanum arsenide, Niobium arsenide, Neodymium arsenide, Triantimony arsenide, Samarium arsenide, Yttrium arsenide, Tribarium diarsenide, Tricalcium diarsenide, Germanium arsenide, Trisilver arsenide, Sodium dimethylarsinate, Arsenic sulfide, Gallium arsenide, Indium arsenide, Diarsenic pentaoxide, Arsenic sulfide, Diarsenic triselenide, Diarsenic trioxide, Ammonium dihydrogenarsenate, Potassium arsenite, Trisodium arsenite, Trisodium arsenate, Zinc arsenate, Tristrontium diarsenate, Tribarium diarsenate, Trinickel bis(arsenate), Trilithium arsenate, Trisilver arsenate, 6,6'-dihydroxy-3,3'-diarsene, 1,2-dilydianilinium dichloride, Sodium metaarsenate, Copper diarsenite, Potassium hexafluoroarsenate, Hydrogen hexafluoroarsenate, N-(p-arsenosophenyl)-1,3,5-triazine-2,4,6-triamine, Aluminium arsenide, Triammonium arsenate, Tricobalt diarsenate, Cobalt arsenide, Nickel arsenide, Tricalcium diarsenite, 3-methyl-4-(pyrrolidin-1-yl)benzenediazonium hexafluoroarsenate, Antimony arsenate, Arsenic acid, copper(2+) salt, Lithium hexafluoroarsenate, Oxophenarsine, Triethyl arsenite, Ammonium copper arsenate, Europium arsenide, Trilead diarsenate, Disodium 4-[(o-arsonophenyl)azo]-3-hydroxynaphthalene-2,7-disulphonate, Tristrontium diarsenide, Tritylium hexafluoroarsenate, Diphenyldiarsenic acid, Neoarsphenamine, Oxophenarsine hydrochloride, Tris[(8 α ,9R)-6'-methoxycinchonan-9-ol] bis(arsenate), Triphenylsulphonium hexafluoroarsenate(1-), Zirconium arsenide, Trimanganese arsenide, Sodium cacodylate	100258-44-4, 10031-13-7, 10048-95-0, 100995-81-1, 10102-49-5, 10102-50-8, 10103-50-1, 10103-61-4, 10103-62-5, 102110-21-4, 102110-62-3, 10476-82-1, 12005-75-3, 12005-81-1, 12005-86-6, 12005-88-8, 12005-89-9, 12005-92-4, 12005-94-6, 12005-95-7, 12006-08-5, 12006-09-6, 12006-10-9, 12006-12-1, 12006-21-2, 12006-40-5, 12044-16-5, 12044-20-1, 12044-21-2, 12044-22-3, 12044-25-6, 12044-28-9, 12044-49-4, 12044-54-1, 12044-55-2, 12068-61-0, 121-19-7, 12254-85-2, 12254-88-5, 12255-04-8, 12255-08-2, 12255-09-3, 12255-36-6, 12255-39-9, 12255-48-0, 12255-50-4, 12255-53-7, 12271-72-6, 12417-99-1, 124-65-2, 12612-21-4, 1303-00-0, 1303-11-3, 1303-28-2, 1303-33-9, 1303-36-2, 1327-53-3, 13462-93-6, 13464-35-2, 13464-37-4, 13464-38-5, 13464-44-3, 13464-68-1, 13477-04-8, 13477-70-8, 13478-14-3, 13510-44-6, 139-93-5, 15120-17-9, 16509-22-1, 17029-22-0, 17068-85-8, 21840-08-4, 22831-42-1, 24719-13-9, 24719-19-5, 27016-73-5, 27016-75-7, 27152-57-4, 27569-09-1, 28980-47-4, 29871-13-4, 29935-35-1, 306-12-7, 3141-12-6, 32680-29-8, 32775-46-5, 3687-31-8, 3688-92-4, 39297-24-0, 437-15-0, 4519-32-8, 457-60-3, 538-03-4, 549-59-7, 57900-42-2, 60909-47-9, 61219-26-9, 6131-99-3, 618-82-6, 62337-00-2, 62613-15-4, 63217-32-3, 63217-33-4, 637-03-6, 64475-90-7, 64973-06-4, 65453-05-6, 67251-38-1, 67712-00-9, 68611-46-1, 68892-01-3, 68951-38-2, 69011-59-2, 69029-51-2, 69029-67-0, 70333-07-2, 7440-38-2, 75-60-5, 7631-89-2, 7778-39-4, 7778-43-0, 7778-44-1, 7784-08-9, 7784-33-0, 7784-34-1, 7784-35-2, 7784-36-3, 7784-37-4, 7784-38-5, 7784-40-9, 7784-41-0, 7784-44-3, 7784-45-4	19	Banned as substances or in mixtures where the substance or No mixture is intended for use to prevent the fouling by micro-organisms, plants or animals (e.g. hulls of boats, cages, floats, nets, submerged applicanes or equipent), in the preservation of wood. Possible exemptions.	No predicted presence for the banned application. However, arsenic can be found in electronics (Gallium arsenide is an important semiconductor material, insed in ICs, in laser diodesand LEDs). 1303-28-2, 1327-53-3, 3687-31-8, 7778-44-1, 7778-39-4 and 7784-40-9 are SVHCs.
Organostannic compounds (TBT,TPT,DBT, DOT etc.)	-	20	Restricted as substances or in mixtures where the substance or No mixture is acting as biocide in free association paint to prevent the fouling by micro-organisms, plants or animals. Threshold limits of Tri-substituted organostannic compounds: <0.1%/w in all articles; Dibutyltin (DBT) compounds: <0.1%/w in all mixtures and articles supplied to the public; DBT exception: materials and articles regulated under Regulation (EC) No 1935/2004. Dioctyltin (DOT) compound: <0.1%/w in articles supplied to the public (for example, textile, nappies)	No predicted presence for the banned application. However, organostannic compounds are used as stabilizers for PVC, as antifouling biocides and as catalysts for the production of polyurethanes and silicones.
Di- μ -oxo-di-n-butylstanniohydroxyborane / Dibutyltin hydrogen borate C8H19BO3Sn (DBB)	75113-37-0	21	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight (possible exemption) Restricted use: as a substance, or in mixtures in a concentration No equal to, or greater than 0,1 % by weight	No known usage in articles.
Pentachlorophenol and its salts and esters, Pentachlorophenol esters, Pentachlorophenol salts, Sodium pentachlorophenolate, N2-benzyl pentachlorophenyl N2-carboxy-L-(2-aminoglutaramate), Perchlorophenyl N-(benzyloxycarbonyl)-L-isoleucinate, Perchlorophenyl S-benzyl-N-(benzyloxycarbonyl)-L-cysteinate, Pentachlorophenyl N-[(4-methoxyphenyl)methoxy]carbonyl-L-serinate, Perchlorophenyl 5-oxo-L-prolinate, Zinc bis(pentachlorophenolate), Pentachlorophenyl laurate, Potassium pentachlorophenolate, Pentachlorophenol	131-52-2, 13673-51-3, 13673-53-5, 13673-54-6, 23234-97-1, 28990-85-4, 2917-32-0, 3772-94-9, 7778-73-6, 87-86-5	22		Used as herbicide, insecticide, fungicide, algaecide, and disinfectant and as an ingredient in anti-fouling paint. Some applications were in agricultural seeds (for nonfood uses), leather, masonry, wood preservation, cooling tower water, rope, and paper mills. http://www.who.int/water_sanitation_health/dwq/chemicals/pentachloro-phenol.pdf

Cadmium and its compounds (Cadmium compounds, Cadmium nitrate, Cadmium chloride phosphate (Cd5Cl(PO4)3), manganese-doped, Flue dust, copper-lead blast furnace, 9, 101012-93-5, 101012-94-6, 10108-64-2, 10124-36-4, 31119-cadmium-indium-enriched, Dodecanoic acid, cadmium salt, basic, Octadecanoic acid, 53-6, 101356-99-4, 101357-00-0, 101357-01-1, 101357-02-2, cadmium salt, basic, Octadecanoic acid, 12-hydroxy-, cadmium salt, basic, Cadmium 101357-03-3, 101357-04-4, 10196-67-5, 102110-30-5, 102184-chloride, Cadmium sulphate, Cadmium oxide (CdO), solid soln. with calcium oxide and titanium oxide (TiO2), praseodymium-doped, Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, aluminum and copper-doped, Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, copper 4, 1306-19-0, 1306-23-6, 1306-24-7, 1306-25-8, 13477-17-3, and manganese-doped, Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, europium-doped, Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, gold and manganese-doped, Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, 14486-19-2, 14566-86-0, 14689-45-3, 14874-24-9, 14923-81-0, manganese and silver-doped, Cadmium myristate, Cadmium oxide (CdO), solid soln. with magnesium oxide, tungsten oxide (WO3) and zinc oxide, Silicic acid, zirconium salt, 15743-19-8, 15851-44-2, 15852-14-9, 16039-55-7, 16056-72-7, cadmium pigment-encapsulated, Cadmium perchlorate hexahydrate, Cadmium dioleate, 16105-06-9, 16986-83-7, 17010-21-8, 18974-20-4, 18991-05-4, Cadmium selenide sulphide, Barium cadmium tetrastearate, Cadmium titanium trioxide, 19010-65-2, 19010-79-8, 21041-95-2, 2191-10-8, 2223-93-0, Tricadmium diphosphide, Antimony, compound with cadmium (2:3), Cadmium zirconium trioxide, Pentacadmium chloridetriphosphate, Dicumium niobate, Dicumium selenide sulphide, Cadmium ditantalum hexaoxide, Cadmium zinc sulphide, Cadmium selenide sulfide, Cadmium sulfoselenide orange, Cadmium oxide, Cadmium sulphide, Cadmium selenide, Cadmium telluride, Tricadmium bis(phosphate), Cadmium silicate, Cadmium sulphite, Diboron tricadmium hexaoxide, Dicumium hexakis(cyano-C)ferrate(4-), 7, 513-78-0, 52337-78-7, 542-83-6, 543-90-8, 5743-04-4, 55700-Cadmium selenite, Cadmium selenate, Cadmium diricinoleate, Cadmium orthophosphate, 14-6, 56982-42-4, 5743-04-4, 58339-34-7, 61789-34-2, 61951-96-Cadmium molybdenum tetroxide, Cadmium disulphamate, Cadmium hydrogen phosphate, Cadmium succinate, Cadmium bis(diethylthiocarbamate), Cadmium chromate, Cadmium dipotassium tetracyanide, Cadmium tetrafluoroborate, 8, 68131-59-9, 68214-25-5, 68309-98-8, 68332-81-0, 68409-82-Bis(dibutylthiocarbamate-S,S')cadmium, Bis(pentane-2,4-dionato-O,O')cadmium, 5, 68478-53-5, 68479-13-0, 68784-10-1, 68784-55-4, 68855-80-Tris(ethylenediamine)cadmium dihydroxide, Cadmium diicosanoate, Cadmium bis(piperidine-1-carbodithioate), Bis(dimethylthiocarbamate-S,S')cadmium, Lauric acid, 0, 68891-87-2, 68953-39-9, 68956-81-0, 68966-97-2, 69011-69-barium cadmium salt, Disodium tetrakis(cyano-C)cadmate(2-), Dipotassium [[N,N'-cadmium tetrakis(cyano-C)cadmate(2-)]], 2, 69012-21-1, 69012-57-3, 69029-63-6, 69029-70-5, 69029-77-	23	Restricted in mixtures, paints, coating, brazin fillers and articles (0.01 % w/w in PVC, PUR, LDPE, CA, CAB, epoxy resins, MF, UF, UP, PET, PBT, VPE, polystyrene PP etc.). Applicable exemptions.	Yes	Are RoHS substances and 10108-64-2, 10124-36-4, 1306-19-0, 1306-23-6, 31119-53-6, 7440-43-9 and 7790-79-6 are SVHCs	
Monomethyl-tetrachlorodiphenyl methane Trade name: Ugilec 141	76253-60-6	24	Banned as substances or in mixtures or articles. Applicable exemption.	Yes	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. TETRACHLOROBENZYLTOLUENES July 2002. NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME. GPO Box 58, Sydney NSW 2001, Australia www.nicnas.gov.au
Monomethyl-dichloro-diphenyl methane Trade name: Ugilec 121, Ugilec 21	-	25	Banned as substances or in mixtures or articles.	Yes	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. TETRACHLOROBENZYLTOLUENES July 2002. NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME. GPO Box 58, Sydney NSW 2001, Australia www.nicnas.gov.au
Monomethyl-dibromo-diphenyl methane bromobenzylbromotoluene, mixture of isomers Trade name: DBBT	99688-47-8	26	Banned as substances or in mixtures or articles.	Yes	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. http://archive.pic.int/CH/Demo/embed/view_displayFRA.php?id=705
Nickel and its compounds - Nickel compounds - Nickel	7440-02-0	27	Restrictions in any post assemblies which are inserted into pierced ears and other pierced parts of the human body and in articles intended to come into direct and prolonged contact with the skin (e.g. earrings, necklaces, bracelets, chains etc.)	Yes	Possible presence in parts that are can be touched by the user (e.g. buttons, casing, viewfinders etc.)
Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as carcinogen category 1A or 1B (Table 3.1) or carcinogen category 1 or 2 (Table 3.2) and listed as follows (See group members): Carcinogen category 1B (Table 3.1)/ carcinogen category 2 (Table 3.2) listed in Appendix 2, Carcinogen category 1A (Table 3.1)/ carcinogen category 1 (Table 3.2) listed in Appendix 1	Please see 1907/2006/EC Appendices 1 and 2	28	Restricted as substances, constituents of other substances or in mixtures. Applicable exemptions.	No	Covers dozens of substances, such as Chromium VI which is a RoHS substance.
Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as germ cell mutagen category 1A or 1B (Table 3.1) or mutagen category 1 or 2 (Table 3.2) and listed as follows (See group members): Mutagen category 1B (Table 3.1)/ mutagen category 2 (Table 3.2) listed in Appendix 4, Mutagen category 1A (Table 3.1)/ mutagen category 1 (Table 3.2) listed in Appendix 3.	Please see 1907/2006/EC Appendices 3 and 4	29	Restricted as substances, constituents of other substances or in mixtures. Applicable exemptions.	No	Covers dozens of substances, such as benzene which can be found in EEE. Some of the listed substances are SVHCs.
Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows (See group members): Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6, Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5	Please see 1907/2006/EC Appendices 5 and 6	30	Restricted as substances, constituents of other substances or in mixtures. Applicable exemptions.	No	Covers dozens of substances such as lead compounds wich are RoHS substances and various pigments

Low temperature tar oil, alkaline; extract residues (coal), low temperature coal tar alkaline. 122384-78-5, 61789-28-4, 65996-85-2, 65996-91-0, 8001-58-9, 31 Creosote oil; wash oil. Tar acids, coal, crude; crude phenols. Distillates (coal tar), upper; 8021-39-4, 84650-04-4, 90640-80-5, 90640-84-9 heavy anthracene oil. Creosote; wash oil. Creosote, wood. Distillates (coal tar), naphthalene oils; naphthalene oil. Anthracene oil. Creosote oil, acenaphthene fraction; wash oil.			Banned use: treatment of wood. Applicable exemptions.	No	90640-80-5 is a SVHC
Chloroform	67-66-3	32	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Used as solvent, pesticide formulations, as a solvent for fats, oils, rubber, alkaloids, waxes, gutta-percha, and resins, as a cleansing agent, grain fumigant, in fire extinguishers, and in the rubber industry, reagent and anesthetic.
1,1,2-Trichloroethane	79-00-5	34	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Used as a solvent and as an intermediate in the synthesis of 1,1-dichloroethane.
1,1,2,2-Tetrachloroethane (R-130)	79-34-5	35	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Used as a solvent and refrigerant.
1,1,1,2-Tetrachloroethane	630-20-6	36	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Used as a solvent and in the production of wood stains and varnishes.
Pentachloroethane	1976-01-07	37	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Used as a solvent for oil and grease, in metal cleaning, and in the separation of coal from impurities.
1,1-Dichloroethene	75-35-4	38	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)		Is used as a comonomer in the polymerization of vinyl chloride, acrylonitrile, and acrylates. It is also used in semiconductor device fabrication for growing high purity silicon dioxide (SiO ₂) films.
Substances classified as flammable gases category 1 or 2, flammable liquids categories - 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not		40	Banned as substances or as mixtures in aerosol dispensers where No these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes (e.g. artificial snow, imitation excrement, horns for parties, stink bombs etc.). 'For professional users only' for other use of aerosol dispensers label. Applicable exemptions.		
Hexachloroethane	67-72-1	41	Banned as substance or in mixtures, where the substance or No mixture is intended for the manufacturing or processing of non-ferrous metals.		
Azocolourants and Azodyes	Please see 1907/2006/EC Appendices 8 and 9	43	Restricted in textile and leather articles which may come into direct No and prolonged contact with the human skin or oral cavity (e.g. clothing, bedding, towels, gloves, chair cover, etc.) (threshold 0.003 % w/w). <0.1%w/w in mixture for Azodyes which are contained in Appendix 9 - 'List of azodyes' and are intended for colouring textile and leather articles.		
Diphenylether, octabromo derivative C ₁₂ H ₂ Br ₈ O	-	45	Restricted as a substance, in mixtures or in articles or flame- Yes retardant parts in a concentration equal to, or greater than 0,1 % by weight. (possible exemptions for some articles and electrical and electronic equipment)		Is used as a flame retardant additive for polymers, primarily in acrylonitrile-butadiene-styrene (ABS) polymers. The main end-use for these polymers is for the housings of office equipment and business machines. However, Electrical and electronic equipment within the scope of Directive 2002/95/EC are exempted. https://echa.europa.eu/documents/10162/01e59081-67a9-473b-8093-4df8bf646ee5

Nonylphenol ethoxylates (C ₂ H ₄ O) _n C ₁₅ H ₂₄ O, Nonylphenol C ₆ H ₄ (OH)C ₉ H ₁₉ ,	25154-52-3	46	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight, in domestic, industrial and institutional cleaning, textile and leather processing, emulsifier in agricultural teat dips, metal working, manufacturing of pulp and paper, cosmetic products, other personal care products and co-formulants in pesticides and biocides. (possible exemptions)	
Nonylphenol ethoxylates (C ₂ H ₄ O) _n C ₁₅ H ₂₄ O. 4-Nonylphenol, branched, ethoxylated. 4-Nonylphenol, ethoxylated. Isononylphenol, ethoxylated. Nonylphenol, branched, ethoxylated, phosphated. Nonylphenol, branched, ethoxylated. Nonylphenol, ethoxylated.	127087-87-0, 26027-38-3, 37205-87-1, 68412-53-3, 68412-54-4, 46a		Restriction after 3 February 2021 in textile articles which can No reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0,01 % by weight of that textile article or of each part of the textile article.	
Chromium VI compounds	-	47	Restricted as a substance or in mixtures, in cement and cement- No containing mixtures if they contain, when hydrated, more than 2 mg/kg (0,0002%) soluble chromium VI of the total dry weight of the cement. Restricted in leather articles and articles containing leather parts coming into contact with the skin. Applicable exemptions.	Are RoHS substances
Toluene	108-88-3	48	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight, where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.	
Trichlorobenzene	120-82-1	49	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight. Applicable exemptions.	Used as a solvent, this compound is a useful precursor to dye and pesticides.
Polycyclic-aromatic hydrocarbons (PAH) - Benzo[e]pyrene (BeP), Benzo[j]fluoranthene (BjFA), Benzo[k]fluoranthene (BkFA), Chrysen (CHR), Benzo[a]pyrene (BaP), Dibenzof[a,h]anthracene (DBAhA), Benzo[a]anthracene (BaA)	192-97-2, 205-82-3, 205-99-2, 207-08-9, 218-01-9, 50-32-8, 53-70-3, 56-55-3	50	Extender oils shall not be placed on the market, or used for the No production of tyres or parts of tyres if they contain — more than 1 mg/kg (0,0001 % by weight) BaP, or — more than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs. Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs (e.g. sport equipment, etc). Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 0,5 mg/kg (0,00005 % by weight of this component) of any of the listed PAHs. Applicable definitions, standards and exemptions.	Unless the EEE is an article for general public or a toy. Used in tyres, rubber, plastic, toys
The following phthalates : Benzyl butyl phthalate (BBP), Bis (2-ethylhexyl) phthalate (DEHP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)	117-81-7, 84-74-2, 84-69-5, 85-68-7	51	Restricted in a concentration greater than 0,1 % by weight of the No plasticised materials, in toys and childcare articles.	They are also EU RoHS and SVHC.
The following phthalates : Di-n-octyl phthalate (DNOP), Di-"isodecyl" phthalate (DIDP), Di-"isononyl" phthalate (DINP), 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich, 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	117-84-0, 26761-40-0, 28553-12-0, 68515-48-0, 68515-49-1	52	Restricted in a concentration greater than 0,1 % by weight of the No plasticised materials, in toys and childcare articles which can be placed in the mouth of children.	Unless the EEE is a toy.
2-(2-methoxyethoxy)ethanol (DEGME)	111-77-3	54	Restricted for supply to the general public, as a constituent of No paints, paint strippers, cleaning agents, self-shining emulsions or floor sealants in concentrations equal to or greater than 0,1 % by weight.	DEGME is used in various applications and products including as an additive in jet fuel, as a solvent in paints, in floor care products, in brake fluid, and in some skin creams and cleansers. https://www.canada.ca/en/health-canada/services/chemical-substances/challenge/batch-3/degme.html
2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5	55	Restricted for supply to the general public, as a constituent of No spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight. Labelling requirements for paints other than spray paints "Do not use in paint spraying equipment".	DEGBE has a wide range of uses as a solvent in paints, dyes, inks, detergents and cleaners. The major function is to dissolve various components of mixtures in both aqueous and nonaqueous systems. https://ec.europa.eu/health/ph_risk/committees/04_sccp/docs/sccp_o_081.pdf
Methylenediphenyl diisocyanate (MDI) including the following specific isomers : 4,4'-Methylenediphenyl diisocyanate, 2,2'-Methylenediphenyl diisocyanate, Methylenediphenyl diisocyanate (MDI), 2,4'-Methylenediphenyl diisocyanate	101-68-8, 2536-05-2, 26447-40-5, 5873-54-1	56	Restricted for supply to the general public, as a constituent of No mixtures in concentrations equal to or greater than 0,1 % by weight. Applicable exemption (with protective equipment and marking requirements)	However, MDI can be found in EEE since they are used to produce polyurethane foams and noncellular (compact) PUR polymers including coatings, elastomers, adhesives, textiles, and paints.
Cyclohexane	110-82-7	57	Restricted for supply to the general public, as a constituent of No neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g. Applicable exemption (with marking requirements)	
Ammonium nitrate (AN)	6484-52-2	58	Restricted as a substance, or in mixtures that contain more than 28 No % by weight of nitrogen in relation to ammonium nitrate, for use as a solid fertiliser, straight or compound. Otherwise restricted as a substance, or in mixtures that contain 16 % or more by weight of nitrogen in relation to ammonium nitrate. Applicable exemptions.	
Dichloromethane	1975-09-02	59	Restricted in paint strippers containing dichloromethane in a No concentration equal to or greater than 0,1 % by weight. Applicable exemptions.	
Acrylamide	1979-06-01	60	Restricted as a substance or in mixtures in a concentration equal to No or greater than 0,1 % by weight, for grouting applications.	Is a SVHC. Used in the production of polyacrylamides (floculator) https://echa.europa.eu/documents/10162/50218bf9-ba0f-4254-a0d9-d577a5504ca7 http://enhs.umn.edu/current/5103/acryl/uses.html

Dimethylfumarate (DMF)	624-49-7	61	Restricted in articles or any parts in concentrations greater than 0,1 No % by weight.	Used as a biocide in furniture or shoes (anti-mould agent). https://echa.europa.eu/documents/10162/13641/background_doc_sea_c_rac_dmfu_en.pdf
Phenylmercury propionate, Phenylmercury 2-ethylhexanoate, Phenylmercury octanoate, 103-27-5, 13302-00-6, 13864-38-5, 26545-49-3, 62-38-4 Phenylmercury neodecanoate, Phenylmercury acetate		62	Restricted in substances, mixtures, articles or any parts in Yes concentrations of mercury greater than 0,1 % by weight (after October 2017)	Are RoHS substances. Used as a catalysts in the production of polyurethane coatings, adhesives, sealants and elastomers. bunerous applications in gaskets and seals, as encapsulant for electronic assemblies, in film and television props, in vibration dampers, for clear polyurethane on labels, water resistant coatings and concrete sealants, for boat repair and repair on conveyor belts, in rollers on swivel chairs and roller skates and in shoe soles. https://echa.europa.eu/documents/10162/4a71bea0-31f0-406d-8a85-59e4bf2409da http://www.nj.gov/health/eoh/rtkweb/documents/fs/1502.pdf
Lead and its compounds	7439-92-1	63	Restricted in any individual part of jewellery articles and in articles No or accessible parts that may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children, in concentrations greater than 0,05 % by weight. Applicable definitions and exemptions.	Unless the EEE is an article which out of RoHS Directive 2011/65/EU and accessible to children. Are RoHS substances.
1,4-Dichlorobenzene	106-46-7	64	Restricted as a substance or as a constituent of mixtures in a No concentration equal to or greater than 1 % by weight, where the substance or the mixture is placed on the market for use or used as an air freshener or deodoriser in toilets, homes, offices or other indoor public areas.	Is used mainly as a fumigant for the control of moths, molds, and mildews, and as a space deodorant for toilets and refuse containers. Is also used as an intermediate in the production of other chemicals, in the control of tree-boring insects, and in the control of mold in tobacco seeds. https://www.epa.gov/sites/production/files/2016-09/documents/1-4-dichlorobenzene.pdf
Inorganic ammonium salts	-	65	Shall not be placed on the market, or used, in cellulose insulation No mixtures or cellulose insulation articles after 14 July 2018. Exemptions and conditions apply.	Used in cellulose insulation mixture.
4,4'-isopropylidenediphenol Bisphenol A; BPA	29348	66	Shall not be placed on the market in thermal paper in a No concentration equal to or greater than 0,02 % by weight after 2 January 2020	Used in thermal paper invoices. Is also used in the production of polycarbonate plastic (PC), and epoxy resins. It also has uses in polyester, polysulfone and polyacrylate resins, and flame retardants. Polycarbonate (PC) is widely used in food contact materials such as infant feeding bottles, tableware, microwave ovenware, food containers, water bottles, milk and beverage bottles, processing equipment and water pipes. Epoxy resins are used as protective linings for a variety of canned foods and beverages and as a coating on metal lids for glass jars and bottles, including containers used for infant formula. http://www.who.int/foodsafety/publications/fs_management/No_05_Bisphenol_A_Nov09_en.pdf
Bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE)	1163-19-5	67	May not be manufactured or placed on the market as a substance Yes on its own, or as a mixture, component, article, or any part thereof in a concentration equal to or greater than 0.1% by weight, after March 2017. Aircraft production is exempt from this new restriction until March 2, 2027. And there are exemptions for electrical and electronic equipment within the scope of Directive 2011/65/EU with PBDE restrictions, motor vehicles within the scope of Directive 2007/46/EC, agricultural and forestry vehicles within the scope of Regulation (EU) No 167/2013, and machinery within the scope of Directive 2006/42/EC.	Is regulated under RoHS substance. Is widely used as an additive flame retardant with applications in many different sectors including the electrical and electronic industry, in particular in plastic articles but also in adhesives, sealants, coatings and inks.
Pentadecafluorooctanoic acid (PFOA) and its salts and related substances	335-67-1	68	Shall not be manufactured, or placed on the market as substances Yes on their own from 4 July 2020. Shall not, from 4 July 2020, be used in the production of, or placed on the market in another substance, as a constituent, a mixture, or an article, in a concentration equal to or above 25 ppb of PFOA including its salts or 1 000 ppb of one or a combination of PFOA-related substances. Deadline is 4 July 2022 for equipment used to manufacture semi-conductors and 4 July 2032 to medical devices other than implatable medical devices. Exemptions apply: e.g. Photo-lithography processes for semiconductors or in etching processes for compound semiconductors and semiconductors & compound semiconductors referred to them.	PFOA fluoropolymer (e.g. teflon) and fluoroelastomer production and photographic industry, fire-fighting foams, paper and cardboard, e.g. in food packaging, adhesives. Possible exemption for semiconductors. PFOA is a SVHC. https://echa.europa.eu/documents/10162/e9cdee63164-473d-b590-8fcf9caa50e7

Methanol	67-56-1	69	Shall not be placed on the market to the general public after 9 May No 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight.	Is used as a solvent, antifreeze in pipelines and windshield washer fluid
Octamethylcyclotetrasiloxane (D4); Decamethylcyclopentasiloxane (D5)	541-02-6, 556-67-2	70	Shall not be placed on the market in wash-off cosmetic products in No a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020.	The uses of D4 can be divided into four main areas: as a site-limited chemical intermediate at the site of production; as an off-site chemical intermediate; in personal care products (e.g. cosmetic products, and skin- and hair-care products); in household products (e.g. cleaning products). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290565/scho0309bpqz-e-e.pdf D5 is commonly used as volatile excipient in cosmetic products. The main use of D5 in cosmetic products is in skin care products, deodorants/antiperspirants, hair care products and make up products. https://ec.europa.eu/health/scientific_committees/consumer_safety/docs/sccs_o_174.pdf
1-methyl-2-pyrrolidone (NMP)	872-50-4	71	Shall not be placed on the market nor manufactured or used as a No substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020. Possible derogation for solvent and reactant in the process of coating wires.	Used in paint and coating removal products. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-n-methylpyrrolidone-nmp#risks It is also used as a formulating agent in pigments, dyes, and inks and in insecticides, herbicides, and fungicides. http://www.who.int/ipcs/publications/cicad/en/cicad35.pdf
The following substances which are classified as carcinogenic, mutagenic or toxic for reproduction, category 1A or 1B: Cadmium and its compounds, Chromium VI compounds, Arsenic compounds, Lead and its compounds, Benzene, Benz[a]anthracene, Benzo[e]acephenanthrylene, benzo[a]pyrene, benzo[def]chrysene, Benzo[e]pyrene, Benzo[k]fluoranthene, Benzo[k]fluoranthene, Bis(2-methoxyethyl) phthalate, Chrysene, Dibenz[a,h]anthracene, $\alpha,\alpha,4$ -tetrachlorotoluene; pchlorobenzotrichloride, α,α -trichlorotoluene; benzotrachloride, α -chlorotoluene; benzyl chloride, Formaldehyde, 1,2-benzenedicarboxylic acid; diC 6-8-branched alkylesters, C 7-rich, Diisopentylphthalate, Di-n-pentyl phthalate (DPP), Di-n-hexyl phthalate (DnHP), N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone (NMP), N,N-dimethylacetamide (DMAC), N,N-dimethylformamide; dimethyl formamide (DMF), 1,4,5,8-tetraaminoanthraquinone; C.I. Disperse Blue 1, Benzenamine, 4,4'-(4-iminocyclohexa-2,5- dienyliidenemethylene)dianiline hydrochloride; C.I. Basic Red 9, [4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien1-ylidene]dimethylammonium chloride; C.I. Basic Violet 3 with $\geq 0,1$ % of Michler's ketone, 4-chloro-o-toluidinium chloride, 2-Naphthylammoniumacetate, 4-methoxy-m-phenylene diammonium sulphate; (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silanetriol and any of its mono-, di- or tri-O- (alkyl) derivatives (TDFAs)	100-44-7, 117-82-8, 127-19-5, 131-18-0, 192-97-2, 205-82-3, 205-99-2, 207-08-9, 21436-97-5, 218-01-9, 2475-45-8, 3165-93-3, 39156-41-7, 50-00-0, 50-32-8, 5216-25-1, 53-70-3, 548-62-9, 553-00-4, 56-55-3, 569-61-9, 605-50-5, 68-12-2, 71-43-2, 71888-89-6, 84-75-3, 872-50-4, 91-22-5, 98-07-7.	72	Shall not be placed on the market after 1 November 2020 in any of No the following: (a) clothing or related accessories; (b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing; (c) footwear; (Thresholds, condutions and exeptions apply)	
		73	Shall not be placed on the market for supply to the general public No after 2 January 2021 individually or in any combination, in a concentration equal to or greater than 2 ppb by weight of the mixtures containing organic solvents, in spray products. Additional marking and communication details.	